

CLAIM SET AS AMENDED

1. (currently amended) A stereophonic sound field reproducing apparatus for reproducing a stereophonic sound field, the apparatus comprising:

a plurality of sound wave output units arranged around each ear of a head of a user at the time of using, each of the sound wave output unit receives signals and outputs sound waves; and

*a* a first signal processing unit which processes signals to be supplied to the sound wave output units so as to simultaneously correct the signal based on the characteristics between the sound wave output units and the head of the user and the characteristics between the sound wave output units.

2. (original) The stereophonic sound field reproducing apparatus according to claim 1, further comprising a holding unit, to be attached to the head of the user at the time of using, which holds the sound wave output units at the circumference of the head of the user.

3. (currently amended) ~~The stereophonic sound field reproducing apparatus according to claim 1,~~

A stereophonic sound field reproducing apparatus for reproducing a stereophonic sound field, the apparatus comprising:

} a plurality of sound wave output units arranged around a head  
y of a user at the time of using, each of the sound wave output unit  
↳ receives signals and outputs sound waves; and

↳ a first signal processing unit which processes signals to be  
^ supplied to the sound wave output units so as to simultaneously  
↳ correct the signal based on the characteristics between the sound  
↳ wave output units and the head of the user and the characteristics  
↳ between the sound wave output units,

a " wherein at least four sound wave output units are provided,  
and

cont wherein the four sound wave output units are arranged in the  
vicinity of the ears of the user in such a manner that at least two  
sound wave output units are provided in the vicinity of each ear.

4. (original) The stereophonic sound field reproducing apparatus according to claim 1, further comprising a plurality of detection units, arranged in positions or their vicinities where a relationship with a head of human body or simulation units simulating human body is the same as a relationship between the head of the user and the sound wave output units at the time of recording, which detect a sound field and generate signals to be supplied to the sound wave output units.

5. (original) The stereophonic sound field reproducing apparatus according to claim 1, further comprising a second signal processing unit which executes a process on the signals to be supplied to the sound wave output units using characteristics from a position where a sound image is fixed to vicinities of the sound wave output units.

6. (currently amended) ~~The stereophonic sound field reproducing apparatus according to claim 1,~~

1 A stereophonic sound field reproducing apparatus for  
2 reproducing a stereophonic sound field, the apparatus comprising:

3 a plurality of sound wave output units arranged around a head  
4 of a user at the time of using, each of the sound wave output unit  
5 receives signals and outputs sound waves; and

6 a first signal processing unit which processes signals to be  
7 supplied to the sound wave output units so as to simultaneously  
8 correct the signal based on the characteristics between the sound  
9 wave output units and the head of the user and the characteristics  
10 between the sound wave output units,

wherein at least eight sound wave output units are provided,  
the eight sound wave output units are arranged in the vicinity of the ears of the user in such a manner that at least four sound wave output units are provided in the vicinity of each ear, and

the four sound wave output units provided in the vicinity of each ear are provided in such a manner that they are positioned at apexes of a triangular pyramid.

7. (currently amended) The stereophonic sound field reproducing apparatus according to claim 1, wherein the first signal processing unit simultaneously corrects characteristics between all of the sound wave output units and the head of the user and characteristics between all of the sound wave output units simultaneously.

8. (currently amended) ~~The stereophonic sound field reproducing apparatus according to claim 1,~~

1 A stereophonic sound field reproducing apparatus for  
2 reproducing a stereophonic sound field, the apparatus comprising:  
3 a plurality of sound wave output units arranged around a head  
4 of a user at the time of using, each of the sound wave output unit  
5 receives signals and outputs sound waves; and  
6 a first signal processing unit which processes signals to be  
7 supplied to the sound wave output units so as to simultaneously  
8 correct the signal based on the characteristics between the sound  
9 wave output units and the head of the user and the characteristics  
10 between the sound wave output units,

wherein, out of the sound wave output units, a desired number of sound wave output units are provided in the vicinity of one ear of the user and the remaining sound wave output units are provided in the vicinity of the other ear, and

the first signal processing unit includes,

a third signal processing unit which corrects characteristics between all the sound wave output units corresponding to the one ear and the head of the user and characteristics between all the sound wave output units corresponding to the one ear; and

a fourth signal processing unit which corrects characteristics between all the sound wave output units corresponding to the other ear and the head of the user and characteristics between all the sound wave output units corresponding to the other ear, and

the third and fourth signal processing units execute the signal process simultaneously.

9. (new) A stereophonic sound field reproducing apparatus for reproducing a stereophonic sound field, the apparatus comprising:

a plurality of sound wave output units arranged around each ear of a head of a user at the time of using, each of the sound wave output unit receives signals and outputs sound waves; and

↳ a first signal processing unit which processes signals to be  
↳ supplied to the sound wave output units so as to simultaneously  
↳ correct the signal based on the characteristics between all of the  
↳ sound wave output units and the head of the user and the  
↳ characteristics between all of the sound wave output units.

*a*  
*cont*  
10. (new) The stereophonic sound field reproducing apparatus according to claim 1, wherein each of the plurality of sound wave output units are arranged around each ear of the head of the user based on a position of a plurality of corresponding sound input units.

11. (new) A stereophonic sound field reproducing apparatus comprising:

a plurality of sound wave output units;

a holder for positioning the plurality of sound wave output units about each ear of a user such that the plurality of sound wave output units are each positioned about each ear corresponding to a position of a plurality of sound input units;

a signal processing unit for simultaneous correction of signals transmitted from the plurality of sound input units to the plurality of sound wave output units.

12. (new) The stereophonic sound field reproducing apparatus according to claim 11, wherein cross talk components of the sound input units are cancelled.

*a*  
*Cont*  
13. (new) The stereophonic sound field reproducing apparatus according to claim 11, wherein the signal processing unit further includes a plurality of correction circuits corresponding to each of the plurality of sound input units.

14. (new) The stereophonic sound field reproducing apparatus according to claim 13, wherein each of the plurality of correction circuits corrects characteristics of the plurality of sound input units, characteristics of the plurality of sound output units, cross talk components of the plurality of sound input units, and cross talk components of the plurality of sound output units.

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